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1. (Currently Amended) An electrostatic chuck comprising:
a base plate;
individually controlled height adjustment mechanisms connected to said base plate; and
electrostatic chuck pins connected to said height adjustment mechanisms,
wherein said height adjustment mechanisms are adapted to individually adjust positions of said electrostatic chuck pins to change a shape of a device being held by said electrostatic chuck pins so as to compensate for flatness deformities in a said device being held by said electrostatic chuck pins.
- 2-4. (Canceled).
5. (Original) The electrostatic chuck in claim 1, wherein said height adjustment mechanisms comprise computer-controlled devices.
6. (Original) The electrostatic chuck in claim 1, wherein said height adjustment mechanisms comprise devices that automatically maintain a flatness of a device being held by said electrostatic chuck pins.
7. (Original) The electrostatic chuck in claim 1, wherein said height adjustment mechanisms comprise one of screw type mechanisms, piezoelectric actuators, hydraulic actuators, hydraulic pistons, thermal actuators, and magnetic actuators .
- 8.-13 (Canceled).
14. (Currently Amended) A system for maintaining a device flat on an electrostatic chuck, said system comprising:
an electrostatic chuck comprising individually controlled height adjustment mechanisms and electrostatic pins connected to said height adjustment mechanisms;
a measurement tool adapted to measure the flatness of a device held by said electrostatic pins; and

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a computer linked to said height adjustment mechanisms and said measurement tool, said computer being adapted to change a shape of said device so as to adjust said flatness of said device by individually adjusting said height adjustment mechanisms based on feedback from said measurement tool.

15. (Previously Presented) The system in claim 14, wherein said height adjustment mechanisms individually control the height of each electrostatic pin.

16. (Previously Presented) The system in claim 14, wherein said height adjustment mechanisms control the flatness of said device being held by said electrostatic pins.

17. (Currently Amended) A system for maintaining a device flat on an electrostatic chuck, said system comprising:

an electrostatic chuck comprising individually controlled height adjustment mechanisms and pins connected to said height adjustment mechanisms;
a measurement tool adapted to measure the flatness of a device held by said pins;
and

a computer linked to said height adjustment mechanisms and said measurement tool, said computer being adapted to change a shape of said device so as to adjust said flatness of said device by individually adjusting said height adjustment mechanisms based on feedback from said measurement tool,

wherein said height adjustment mechanisms compensate for foreign matter particles between said electrostatic chuck pins and said device being held by said electrostatic chuck pins.

18. (Original) The system in claim 14, wherein said height adjustment mechanisms comprise computer-controlled devices.

19. (Currently Amended) The system in claim 14, wherein said computer is adapted to change ~~the~~ a shape of said device to conform to a pre-existing standard.

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20. (Original) The system in claim 14, wherein said height adjustment mechanisms comprise one of screw type mechanisms, piezoelectric actuators, hydraulic actuators, hydraulic pistons, thermal actuators, and magnetic actuators.

21. (Currently Amended) A system for maintaining a device flat on an electrostatic chuck, said system comprising:

an electrostatic chuck comprising: a base plate; individually controlled height adjustment mechanisms connected to said base plate; and electrostatic chuck pins connected to said height adjustment mechanisms;

a measurement tool adapted to measure the flatness of a device held by said electrostatic chuck pins; and

a computer connected to said height adjustment mechanisms and said measurement tool, said computer being adapted to change a shape of said device so as to adjust said flatness of said device by individually adjusting said height adjustment mechanisms based on feedback from said measurement tool.

22-23. (Canceled).

24. (Currently Amended) A system for maintaining a device flat on an electrostatic chuck, said system comprising:

an electrostatic chuck comprising: a base plate; individually controlled height adjustment mechanisms connected to said base plate; and electrostatic chuck pins connected to said height adjustment mechanisms;

a measurement tool adapted to measure the flatness of a device held by said electrostatic chuck pins; and

a computer connected to said height adjustment mechanisms and said measurement tool, said computer being adapted to change a shape of said device so as to adjust said flatness of said device by individually adjusting said height adjustment mechanisms based on feedback from said measurement tool,

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wherein said height adjustment mechanisms compensate for foreign particles between said electrostatic chuck pins and a device being held by said electrostatic chuck pins.

25. (Original) The system in claim 21, wherein said height adjustment mechanisms comprise computer-controlled devices.

26. (Currently Amended) The system in claim 21, wherein said computer changes the shape of said device to conform to a pre-existing standard by ~~adjusting~~ individually adjusting said height adjustment mechanisms.

27. (Original) The system in claim 21, wherein said height adjustment mechanisms comprise one of screw type mechanisms, piezoelectric actuators, hydraulic actuators, hydraulic pistons, thermal actuators, and magnetic actuators .

28. (Currently Amended) A method of attaching a device to an electrostatic chuck, said method comprising:

attaching said device to electrostatic pins of said electrostatic chuck;

measuring a flatness of said device; and

individually controlling each adjusting the height of said electrostatic pins to individually adjust a height of each of said electrostatic pin to change a shape of said device so as to correct any flatness errors determined in said measuring of said flatness of said device.

29. (Previously Presented) The method in claim 28, wherein said adjusting of said height of said electrostatic pins comprises adjusting height adjustment mechanisms connected between said electrostatic pins and a plate of said electrostatic chuck.

30. (Original) The method in claim 29, wherein said adjusting process adjusts each height adjustment mechanism individually.

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31. (Original) The method in claim 28, wherein said adjusting process is performed using a computer connected to a measurement device and to height adjustment mechanisms.
32. (Previously Presented) The method in claim 28, wherein said adjusting process compensates for foreign matter particles between said electrostatic pins and said device being held by said electrostatic pins.
33. (Original) The method in claim 28, wherein said adjusting process changes the shape of said device to conform to a pre-existing standard.
34. (Currently Amended) A method of attaching a device to an electrostatic chuck, said method comprising:
attaching said device to electrostatic chuck pins of said electrostatic chuck;
measuring a flatness of said device; and
individually controlling each adjusting the height of said electrostatic pins to individually adjust a height of each of said electrostatic pin to change a shape of said device so as to correct any flatness errors determined in said measuring process,
wherein said measuring process is performed using an interferometer.
35. (Currently Amended) A method of attaching a device to an electrostatic chuck, said method comprising:
attaching said device to electrostatic chuck pins of said electrostatic chuck;
measuring a flatness of said device; and
individually controlling a adjusting the height of height adjustment mechanisms connected between said electrostatic chuck pins and a plate of said electrostatic chuck to change a shape of said device so as to correct any flatness errors determined in said measuring process.
36. (Canceled).

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37. (Original) The method in claim 35, wherein said adjusting process is performed using a computer connected to a measurement device and to said height adjustment mechanisms.

38. (Original) The method in claim 35, wherein said adjusting process compensates for foreign matter particles between said electrostatic chuck pins and said device being held by said electrostatic chuck pins.

39. (Currently Amended) The method in claim 35, wherein said adjusting process changes the a shape of said device to conform to a pre-existing standard.

40. (Original) The method in claim 35, wherein said measuring process is performed using an interferometer.